PATENT

5   ABSTRACT

A system and method for testing the upstream channel of a cable modem system. A
tester generates a known test pattern and transmits the pattern to the Cable Modem
Termination System (CMTS). If there are errors in the packet resulting from the
10   upstream channel, the CMTS discards the packet based on standard Internet Protocol. If
there are no errors the packet is returned on the downstream channel to the tester. The
tester counts all returned test packets received including test packets with errors resulting
in the downstream. Packets with errors are not discarded as they normally would be, but
are checked for a portion of the repeating test pattern and checked for the correct number
15   of bits of a test packet. All packets determined to be test packets, including those with
errors, are counted over a period of time and compared to the number of packets
originally sent. From this information the performance of the upstream channel can be
inferred. Preferably the tester calculated Block Error Rate and Lost Packets based on the
number of packets returned compared to the number originally sent.

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